

**ARIZONA GAME AND FISH DEPARTMENT
HABITAT PARTNERSHIP PROGRAM
HABITAT ENHANCEMENT AND WILDLIFE MANAGEMENT PROPOSAL**

PROJECT INFORMATION	
Project Title: Cunningham Wildlife Catchment Redevelopment - 2010	Project No. 09-209
Region/GMU: Region II/ GMU 13B	HPC: Fredonia
Project Type: Wildlife Water Development	
Project Description: Improve the water collection and storage capabilities of Cunningham Wildlife Catchment, in the Grand Wash Cliffs of southern 13B. This project will involve redeveloping the existing catchment with new materials. New r-panel type roofing panels will replace the current metal sheeting at the site. These panels will be fastened to a new metal frame. A 3' x 20' fiberglass tank will replace the existing metal tank, and a new 3' walk in style trough will replace the existing drinker. The redevelopment of this water will greatly improve water availability for Bighorn Sheep in the area.	
Wildlife Species to Benefit: Bighorn Sheep	
Possible Funding Partners:	
Implementation Schedule: Beginning: Spring/Summer 2010 Completed: Summer 2011	NEPA Compliance: (if applicable) Completed: Yes <u> X </u> No <u> </u> Projected Completion Date:
PROJECT FUNDING	
SBG Funds Requested: \$ 42870.00 Cost Share Funds: \$ ----- Total Project Costs: \$ 42870.00	
PARTICIPANT INFORMATION	
Applicant: Luke F. Thompson Telephone: 435-574-2978	Address: 3500 S Lake Mary Road Flagstaff, AZ 86001
AGFD Contact and Phone No. (If applicant is not AGFD personnel)	
Coordinated with: BLM – Arizona Strip Field Office, ADBSS	Date: Ongoing 2007-2009
Applicant's signature:	Date: September 1, 2009

SEND COMPLETED APPLICATIONS TO:
Game Branch
AZ Game and Fish Dept.
5000 W. Carefree Highway
Phoenix, AZ 85086

WAS PROJECT PRESENTED TO THE LOCAL HPC? YES _____ NO X

The Fredonia HPC did not meet in 2009 however, this project is a part of the statewide Water Implementation Schedule, the ADBSS has been consulted with, and a site visit has been completed.

HAS PROJECT BEEN SUBMITTED IN PREVIOUS YEARS? No IF SO WAS IT FUNDED?

NEED STATEMENT/PROBLEM ANALYSIS:

Cunningham wildlife catchment is a BLM owned catchment located in Snap Canyon in the Grand Wash Cliffs of southern 13B. Cunningham wildlife catchment currently has a ground level apron secured by rocks. The apron is small for the storage capability, and is attached to a steel storage tank via a PVC pipeline. The tank, approximately 5000 gallons, leads to a ground level metal drinking trough that has developed pitholes, and has become the failing component of this system. The trough is regulated by a float valve system. There is no road access to the facility.

Because of its age, Cunningham wildlife catchment has begun to fail. The metal drinking trough has developed pitholes below the minimum setting of the float valve assembly, severely limiting the ability of the catchment to hold water. In essence, it slowly leaks until the tank is dry. While it currently can hold water near capacity, the ability of the small apron to collect water, and the important fact that the ground level drinker has developed pitholes, limits this facilities value to the reintroduced bighorn sheep in the area.

Helicopter water hauling occurred in 2007 resulting in a cost of approximately \$3000.00. Helicopter water hauling also occurred in 2002 as part of operations for other facilities and those efforts cost approximately \$5900.00. In 2008, a temporary trough was placed at the catchment. This has held water but is only as temporary fix. If these efforts were not completed Bighorn likely would have died. **Helicopter water hauling and/or maintenance will continue to occur resulting in exorbitant costs to the Department if this project is not redeveloped in a timely manner.**

The bighorn in 13BS are completely an effort of reintroduction efforts that began in the 1970's. Most recent efforts include an effort in 1995 when 22 bighorn were released near the Cunningham Catchment site, and in 1999 when 22 bighorn were released at Olaf Wildlife Catchment.

Further, the Snap Canyon area currently holds the highest density of Bighorn for the 13BS population. During surveys, bighorn sheep have been consistently documented from year to year using this area, hunters spend significant time hunting in the area, and remote camera pictures have been the best of all sites in the Grand Wash Cliffs. The value of this wildlife facility to Bighorn, hunters, and the public of the state cannot be understated, and without redevelopment, there is risk of losing the bighorn population in the area.



Remote Camera Photograph at Cunningham 2004



Cunningham Catchment 2007

PROJECT OBJECTIVES: There are several objectives of this project:

1. Improve water availability and distribution for bighorn sheep in the Grand Wash Cliffs of southern 13B.
2. Improve habitat use and distribution of bighorn sheep, by providing an additional reliable water source in the area.
3. Continue the task through the Statewide Water Development Implementation schedule of redeveloping wildlife water catchments in 13B that have failed or are in disrepair because of their age.
4. Decrease maintenance needs by increasing capacity, and removing mechanical components from system.

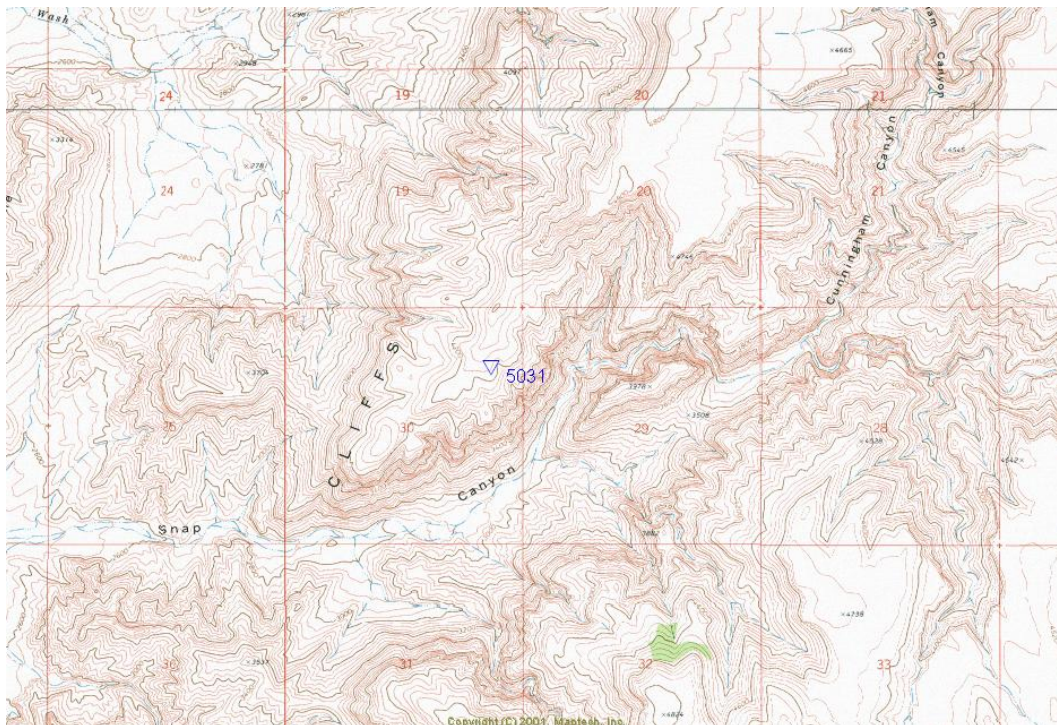
PROJECT STRATEGIES:

1. Install 3x20 fiberglass tank with capacity of approximately 7000 gallons.
2. Construct a 24' x 72' r-panel metal apron over tank.
3. Install a 3' walk in trough to replace the existing ground level drinker.
4. Remove the float valve assembly.

Because of the location of the project, a helicopter will be needed to sling load materials from the staging area, to the project site. The staging area is projected to be the Cunningham Mine ~ 2.5 miles away.

These steps will ensure that the water collection and storage capabilities of this wildlife catchment will improve greatly and ensure that objectives of this project are met.

PROJECT LOCATION: T33N R14W sec 30 GPS 36° 14.063' N 113° 49.676' W



LAND OWNERSHIP AT PROJECT SITE (Please state specifically if PRIVATE PROPERTY and provide landowner's name): 100% federal administered by the BLM – Arizona Strip Field Office

IF PRIVATE PROPERTY, IS THERE A STEWARDSHIP AGREEMENT BETWEEN THE LANDOWNER AND THE DEPARTMENT? N/A

HABITAT DESCRIPTION:

The habitat surrounding this catchment is highly beneficial to bighorn sheep. Black brush, mortonia, cliffrose, various shrubs, many forb species, and several grass species are present in the area.

ITEMIZED USE OF FUNDS:

ESTIMATED PROJECT COST SHEET

Cunningham Wildlife Catchment Redevelopment – 2008

Costs Category-Equipment, Labor, Administrative, Material	Grant Dollars Requested – Special Tag
24x72 elevated r-panel apron package – Includes r-panel roofing, metal studs, gutter and associated hardware	\$7000.00
Helicopter including ferry time and fuel truck	\$20,000.00
3x20 fiberglass ring tank - Includes Tax	\$10600.00
Plumbing Materials	\$1000.00
3' Walk in Fiberglass trough	\$3270.00
Associated concrete and miscellaneous hardware	\$1000.00
Totals	\$42870.00

LIST COOPERATORS AND DESCRIBE POTENTIAL PARTICIPATION:

ADBSS – Funding partner and assistance with on the ground work.

PROJECT MONITORING PLAN:

After completion of this project, this wildlife catchment will continue to be monitored as part of the Region II/GMU 13B water development protocol. This protocol outlines facility inspection schedules, as well as maintenance schedules if needed. It is anticipated that this wildlife catchment will be inspected at least twice between April and October each year.

PROJECT MAINTENANCE:

Maintenance of this wildlife water facility will be completed cooperatively with the BLM and the Arizona Game and Fish department as partners. Any future maintenance including water hauling, etc., will be coordinated between the agencies.

PROJECT COMPLETION REPORT TO BE FILED BY:

Luke Thompson – Wildlife Manager GMU 13B

WATER DEVELOPMENT PROJECTS (see attached worksheet):

TREE SHEARING (AGRA-AXE, PUSH) PROJECTS (see attached worksheet): N/A

ARIZONA GAME AND FISH DEPARTMENT **WATER DEVELOPMENT WORKSHEET**

PROJECT NAME: Cunningham Wildlife Catchment Redevelopment - 2010

1) Is the water development listed as a priority in the most recent "Wildlife Water Development Annual Implementation Schedule?" Yes

2) Please list the Development Branch personnel and date coordinated with for this project. Joe Currie/Ed Jahrke – Summer 2005 through August 2009. Joe and Ed both have been parts of helicopter field trips in 2005 and 2009 to develop project designs and feasibility of implementation.

3) What is the estimated annual inches of precipitation for the area? (mark one)
 2-4 4-6 6-8 8-10 X 10-12 12-14 14-16 >16

4) Is there a perennial water source available to big game within four miles of this project? X YES (please complete #5 below) NO (skip #5 below) **There are several big game catchments within 4 miles of Cunningham. Because of elevational and habitat differences however only one is in Bighorn Sheep habitat. It is nearly 4 miles away in a completely different portion of habitat and is described below. The other catchments are located well within Mule Deer habitat and most likely not utilized by bighorn.**

5) For the accessible, perennial water source nearest this project:

Name of water source: Pick Point 985

Type of water source (catchment, spring, dirt tank, etc.): Catchment

Ownership of water source: AZGFD

Distance in miles from project: 3.8 Miles

6) Is the target wildlife species a result of transplant efforts? X YES NO

Several efforts have been initiated to transplant bighorn into the area. The existing bighorn population in 13BS is the result of these efforts. In 1995 22 bighorn were released near this site. The most recent effort for 13BS occurred in 1999.

7) Please list any special land management status for the project site (i.e. Wilderness, National Park, National Monument, etc). If private land, list landowner. Located within Grand-Canyon Parashant National Monument

8) Please provide the following information about access to the proposed site:

Type of access (mark one): 2x4 vehicles 4x4 only X foot only** ****If foot access only:** Distance in miles: ~3 miles Approx. hiking time: 2 hours

-- Does access to this site require crossing private or tribal lands? YES X NO

-- Please describe any restrictions to public access: None. Land is 100% federal Managed By the BLM Arizona Strip

**Project would require the use of a helicopter.

9) Please list below (or on a separate sheet) the material type and dimensions of each component proposed to be added, modified, or repaired.

24'x72' elevated r-panel metal apron Includes r-panel roofing, metal studs, gutter and associated hardware
3x20 fiberglass ring tank
Plumbing Materials
3' Walk in Fiberglass trough

10) Was a site visit completed? X Yes ___ No

If Yes, please list personnel that attended and date.

Joe Currie and Luke Thompson July 2005.

Ed Jahrke, ADBSS personnel, and Luke Thompson June 2009